

ABSTRACT OF THE DISCLOSURE

First and second trenches are formed on an n^+ type substrate at a power MOSFET formation region and a peripheral device formation region, respectively. An n^- type epitaxial film, a p type epitaxial film, and an n^+ type epitaxial film are deposited on the substrate and in the trenches, and then flattening is performed. As a result, an n^- type region is provided in the second trench of the peripheral device formation region. Then, a p type well layer is formed in the n^- type region by ion-implantation. Accordingly, a power MOSFET and a peripheral device can be formed at the power MOSFET formation region and the peripheral device formation region easily.
